



AVOX Systems

Portable Oxygen Cylinder and Regulator Type MA-1



The AVOX Systems Type MA-1 Portable Oxygen Cylinder and Regulator is a self-contained breathing device designed to supply flight personnel with oxygen for normal or emergency use – without interfering with personnel movements or mobility. The unit, with clothing clip, attaches easily to a flight suit.

The demand pressure regulator supplies oxygen at negative or positive pressures, controlled by a 4-position selector knob. The unit is designed for use with Type A-13 or equivalent masks at altitudes to 43,000 feet by moderately active flight personnel – or up to 45,000 feet in extreme emergency situations of short duration.

This Type MA-1 unit conforms to MIL-DTL-5886. The A-21 regulator assembly conforms to MIL-PRF-7605 requirements.

Outstanding Features

- Rugged stainless steel cylinder
- 4-position selector knob for positive/negative mask pressures
- Compact design weighs only 6.25 lbs.
- Cylinder storage pressure – 450 psi

AVOX Systems Inc.
225 Erie Street
Lancaster, NY 14086

Tele: 716 683-5100
Fax: 716 681-1089
www.avoxsys.com





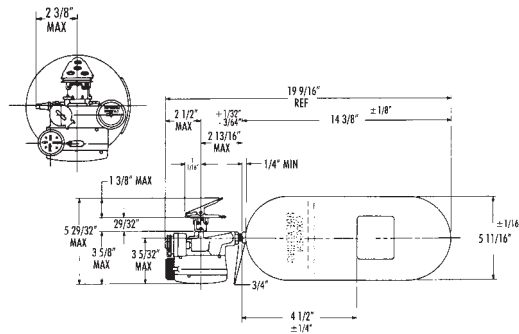
Operation

Oxygen enters the Type A-21 regulator from the stainless steel storage cylinder at a pressure of 50 to 450 psi. Cylinder pressure is reduced to a usable pressure of approximately 40 psi by the action of the first stage valve and the bellows. Upon insertion of the mask connector and inhalation by the user, the reduced oxygen pressure flows to the user by the action of the diaphragm pressing against and opening the demand valve, thus allowing the flow of oxygen to the mask.

The four-position selector knob on the regulator allows for increasing degrees of depression of a baffle plate against the diaphragm. As the knob is moved from "NORM" position, through "30M" and "42M", to the "EMER" position, the diaphragm is depressed in increasing amounts resulting in deflection of the demand valve. This action causes the regulator to deliver the proper quantity of oxygen necessary at various operational altitudes.

For service instructions, see USAF T.O.'s
15x6-4-3-4, 15x6-4-3-3, 15x6-4-3-1.

P/N 9000A-3 (NSN 1660-01-208-0416)



Specifications

Description	P/N 9000A-3 Cylinder-Regulator Assembly
Cylinder Storage Pressure	450 psi
Regulator Operating Pressure	50-500 psi
Cylinder Water Volume	280 cu. in.
Available Oxygen	3.8 cu. ft. from 50 to 400 psi cylinder pressure
Weight	6.25 lbs.
Height	19 9/16"
Width (Depth)	5 11/16"

Spare Parts and Accessories

Demand Pressure Breathing Oxygen Regulator Type A-21	AVOX Systems P/N 9010A-3 (with clothing clip) AVOX Systems P/N 9010A-2 (without clothing clip) NSN 1660-00-782-4697
Cylinder	AVOX Systems P/N 14521-02 (MIL-DTL-5886) Type A-6, stainless steel
Stowage Pouch	AVOX Systems P/N 00-5376 (AF DWG 53D3972) for storing smoke mask dust free, attaches to 588-601 Carrying Harness
Carrying Harness	AVOX Systems P/N 588-601 (AF DWG 52D21102) webbed sling for carrying the Type MA-1 unit
Mounting Bracket	AVOX Systems P/N 800579-00 for secure mounting of the MA-1 unit

WARNING

IMPROPER USE OR IMPROPER MAINTENANCE OF THIS EQUIPMENT
MAY RESULT IN SERIOUS INJURY OR DEATH.

THIS EQUIPMENT IS INTENDED TO BE USED ONLY FOR AVIATION
APPLICATIONS AND IS TO BE USED ONLY BY, OR UNDER THE SUPERVISION
OF, A PILOT OR CREW MEMBER TRAINED AND QUALIFIED IN ITS USE.

THIS EQUIPMENT IS TO BE SERVICED ONLY IN ACCORDANCE WITH THE
APPLICABLE COMPONENT MAINTENANCE MANUAL AVAILABLE FROM

AVOX SYSTEMS AND ONLY BY SERVICE TECHNICIANS TRAINED IN THE
INHERENT HAZARDS OF HIGH PRESSURE AVIATION OXYGEN AND
KNOWLEDGEABLE IN THIS EQUIPMENT. THE NAMES OF AUTHORIZED
SERVICE CENTERS ARE AVAILABLE FROM AVOX SYSTEMS OR YOUR
AUTHORIZED AVOX SYSTEMS DISTRIBUTOR.

THIS EQUIPMENT IS TO BE USED ONLY WITH AVIATOR'S BREATHING
OXYGEN MEETING THE REQUIREMENTS OF MIL-PRF-27210.